Tools Matrix

Sources or Sectors (not in priority order)	Recommended Tool Type	Specific Tool Options	Pollutant Targeted	Priority Level
(1) Vehicles and Engines				
(a) Emissions Performance				
Fleet turnover	A. Financial tools and financial demand-side strategies C. Information programs, reward programs and non-financial demand-side strategies D. Planning tools	A. Tax strategies, loans, equity strategies, and targeted rebates are financing strategies that may encourage fleet turnover (e.g., TERP, DERA). C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Surveys can be used to gauge the effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and influence decisions. D. Modeling to estimate the emission reduction benefits of fleet turnover is recommended.	PM, NOx, VOCs	High
Market penetration of clean engines and fuels	A. Financial tools and financial demand-side strategies C. Information programs, reward programs and non-financial demand-side strategies D. Planning tools	A. Tax strategies, loans, equity strategies, and targeted rebates are financing strategies that may encourage market penetration of clean engines and fuels (e.g., TERP, DERA). C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products.		

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		C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. D. Modeling to predict the penetration of engines and fuels is recommended.		
Emission Controls Diesel Retrofits	A. Financial tools and financial demand-side strategies C. Information programs, reward programs and non-financial demand-side strategies D. Planning tools E. Retrofit strategies	A. Tax strategies, loans, equity strategies, and targeted rebates are financing strategies that may encourage diesel retrofits (e.g., TERP, DERA). C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. D. An inventory of the number of diesel engines that could benefit from retrofit is recommended. E. Retrofit strategies include converting existing engines to an alternative fuel, adding additional emission controls or replacement with a new, cleaner engine.	PM, NOx	
(b) VMT Issues				
Land use planning	A. Financial tools and financial	A. Financial demand-side strategies like differential pricing and		

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	demand-side strategies C. Information programs, reward programs and non-financial demand-side strategies H. Targeted strategies	tax strategies can be used as an incentive. C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Community "Green Action" lists can be utilized to provide access to tools and information that will help promote the use of more sustainable "Green Community" concepts. C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. H. Targeted strategies.		
Transportation planning (including road exposures)	A. Financial tools and financial demand-side strategies C. Information programs, reward programs and non-financial demand-side strategies D. Planning tools H. Targeted strategies	A. Financial demand-side strategies like differential pricing and tax strategies can be used as an incentive. C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Community "Green Action" lists can be utilized to provide access to tools and information that will help promote the use of more sustainable "Green Community" concepts. C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes.		

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		C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. D. Modeling to project VMT for transportation planning is recommended. H. Targeted strategies.		
(2) Other Transportation Systems				
(a) Ships, ports and related goods movement	A. Financial tools and financial demand-side strategies B. Emission trading D. Planning tools E. Retrofit strategies F. Enforcement enhancements H. Targeted strategies I. Emission limits J. Work practice standards	A. Tax strategies, loans, equity strategies, and targeted rebates are strategies that provide financial incentives to reduce emissions. B. Theoretically, an emissions trading tool such as a bubble might be effective. C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and influence decisions. D. Modeling to estimate emission reduction benefits of various strategies is recommended. E. Retrofit strategies include converting existing engines to an alternative fuel, adding additional emission controls or replacement with a new, cleaner engine. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization. H. Targeted strategies. I. Emission limits would be effective for any source with discrete, measurable points of emissions. J. Imposing work practice restrictions on intermittent sources can be effective to address high ozone levels.	PM, NOx, VOCs, SO2, HAPs	F. Medium
(b) Airports	A. Financial tools and financial demand-side strategies B. Emission trading	A. Tax strategies, loans, equity strategies, and targeted rebates are strategies that provide financial incentives to reduce emissions. FAA grants through the VALE program are available.	PM, NOx, VOCs, SO2, HAPs	F. Medium

Sources or Sectors (not in priority order)	Recommended Tool Type	Specific Tool Options	Pollutant Targeted	Priority Level
	D. Planning tools E. Retrofit strategies F. Enforcement enhancements H. Targeted strategies I. Emission limits J. Work practice standards	B. Theoretically, an emissions trading tool such as a bubble might be effective. C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and influence decisions. D. Modeling to estimate emission reduction benefits of various strategies is recommended. E. Retrofit strategies include converting existing engines to an alternative fuel, adding additional emission controls or replacement with a new, cleaner engine. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization. H. Targeted strategies. I. Emission limits would be effective for any source with discrete, measurable points of emissions. J. Imposing work practice restrictions on intermittent sources can be effective to address high ozone levels.		
(c) Rail systems	A. Financial tools and financial demand-side strategies B. Emission trading D. Planning tools E. Retrofit strategies F. Enforcement enhancements H. Targeted strategies	A. Tax strategies, loans, equity strategies, and targeted rebates are strategies that provide financial incentives to reduce emissions. B. Theoretically, an emissions trading tool such as a bubble at rail yards might be effective. C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and influence decisions. D. Modeling to estimate emission reduction benefits of various strategies is recommended. E. Retrofit strategies include converting existing engines to an	PM, NOx, SO2, HAPs	F. Medium

Sources or Sectors (not in priority order)	Recommended Tool Type	Specific Tool Options	Pollutant Targeted	Priority Level
		alternative fuel, adding additional emission controls or replacement with a new, cleaner engine. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization. H. Targeted strategies.		
(3) Rural Sources				
(a) Agriculture (including potential effect on PM formation and acid deposition)	D. Planning tools E. Retrofit strategies F. Enforcement enhancements H. Targeted strategies J. Work practice standards	C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. D. Permit streamlining replaces redundant and unnecessary requirements in favor of practically enforceable limits that can reduce administrative costs, reduce timing, and improve enforcement. D. Modeling to estimate emission reduction benefits of various strategies is recommended. E. Retrofit strategies include converting existing engines to an alternative fuel, adding additional emission controls or replacement with a new, cleaner engine. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization. H. Targeted strategies. J. Work practice standards (referred to as BMPs) are currently in use and effectively controlling emissions from many agricultural sources.	PM, VOCs, ammonia	D. Medium F. Medium
(b) Dust	D. Planning tools H. Targeted strategies J. Work practice standards	C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. H. Targeted strategies.	PM	

Sources or Sectors (not in priority order)	Recommended Tool Type	Specific Tool Options	Pollutant Targeted	Priority Level
		J. Work practice standards are effective tools for dealing with "area" type sources such as dust.		
(3) Small Emitters (e.g., dry cleaners, bakeries, restaurants, etc.)	C. Information programs, reward programs, and non-financial demand-side strategies D. Planning tools F. Enforcement enhancements H. Targeted strategies I. Emission limits J. Work practice standards	C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Community "Green Action" lists can be utilized to provide access to tools and information that will help promote the use of more sustainable "Green Community" concepts. C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. D. Permit streamlining replaces redundant and unnecessary requirements in favor of practically enforceable limits that can reduce administrative costs, reduce timing, and improve enforcement. D. Assessing inventory and population density is recommended. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization. H. Targeted strategies. I. Emission limits would be effective for any source with discrete, measurable points of emissions. With very small sources, it may not be cost effective to conduct routine or continuous source sampling. J. Work practice standards would be an effective alternative to emission limits for most of these sources.	PM, NOx, VOCs, HAPs	D. High F. Medium
(4) Consumer Products (e.g., VOC-containing consumer products)	A. Financial tools and financial demand-side strategies	A. Strategies such as targeted rebates have proven successful. C. Clearinghouses can disseminate information on technology and	PM, NOx, VOCs, SO2,	F. Medium

Sources or Sectors (not in priority order)	Recommended Tool Type	Specific Tool Options	Pollutant Targeted	Priority Level
	C. Information programs, reward programs, and non-financial demand-side strategies	incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Community "Green Action" lists can be utilized to provide access to tools and information that will help promote the use of more sustainable "Green Community" concepts. C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Frequent flyer-type programs can be used to provide incentives for entities that make frequent purchases by offering discounts, rebates, credits or other offerings to promote repeated use of the product(s) being promoted. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general consumption to inform, promote, educate and Influence decisions. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization.	HAPs	
(5) Industrial, Commercial and Residential Boilers and Heaters, Legacy Equipment, and Other Under-Regulated Stationary Sources	B. Emissions trading D. Planning tools F. Enforcement enhancements I. Emission limits	B. Emissions trading tools such as plant-wide applicability limits may be effective. C. Clearinghouses can disseminate information on technology and incentives to educate and promote the use of technologies that have a positive impact on air quality. C. Labeling can be used to inform the general public of the choices they are making and to promote the use of new and innovative technologies and resources. C. Performance benchmarking can be used to highlight the positive characteristics of new and innovative technologies through comparison of these technologies against standard market practices and/or the continued use of existing products. C. Surveys can be used to gauge effectiveness of the programs and to inform federal, state, tribal and local entities of program results and market changes. C. Web tools can be used to move product information. This information can be targeted to a specific audience or for general	PM, NOx, VOCs, SO2	D. High F. Medium

Sources or Sectors (not in priority order)	Recommended Tool Type	Specific Tool Options	Pollutant Targeted	Priority Level
		consumption to inform, promote, educate and Influence decisions. D. Permit streamlining replaces redundant and unnecessary requirements in favor of practically enforceable limits that can reduce administrative costs, reduce timing, and improve enforcement. D. Modeling to estimate emission reduction benefits of various strategies is recommended. D. Inventory assessment is recommended. F. Privatization provides for the outsourcing of certain agency activities to private companies that can improve efficiency for permit issuance, improve agency workload issues and provide for improved prioritization. I. Emission limits can be an effective tool to address these types of sources.		
(6) Non-measured VOC sources detected by thermal IR camera (e.g., floating roof storage tanks, VOC loading racks, pipeline operations, marine vessels and marine loading operations)	A. Financial tools and financial demand-side strategies B. Emission trading D. Planning tools E. Retrofit strategies F. Enforcement enhancements H. Targeted strategies I. Emission limits		VOC	